

Secustos MU20 LEGIC

Multi-frequency access control reader



(exemplary illustrations)

Secustos is a design-oriented multi-technology reader family. This reader for physical access applications is one of the flattest readers on the market. It supports up-to-date interfaces and protocols, like RS-485 and OSDP, but also Wiegand. The IP65 protected housing is made of high-class materials that confer the reader a unique look and feel.

Secustos MU20 LEGIC supports a broad range of HF and LF contactless technologies. Many mobile use cases can be facilitated with its NFC and BLE functions, like authentication and data communication.

Special features:

- + Appealing flat design with premium look and feel, different colors for perfect architectural integration
- + Easy installation with in-wall flush-mount boxes or on-wall mounting frame
- + Supports LEGIC Connect thanks to integrated LEGIC frontend chip
- + Water and dust protected, IP65 potted housing
- + Interfaces: RS-485, OSDP protocol or Wiegand
- + Dimmable LEDs, available with or without additional function key and backlit keypad
- + Proximity sensor, ambient light sensor, tamper switch
- + Versatile remote update and configuration features
- + Mobile app for device parameter configuration via contactless NFC

TECHNICAL DATA

FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
ANTENNAS	Integrated
HOUSING	Metal frame and glass front, potted housing Available in 2 colors (silver or gray)
DIMENSIONS (L X W X H)	Reader frame only (mounted): approx. 123.00 x 42.00 x 8.25 mm / 4.84 x 1.65 x 0.32 inch Rear connector height: approx. 8.00 mm / 0.31 inch Reader with rear connector: approx. 123.00 x 42.00 x 15.90 mm / 4.84 x 1.65 x 0.62 inch Optional mounting frame: approx. 123.00 x 42.00 x 9.85 mm / 4.84 x 1.65 x 0.39 inch
POWER	Connector X1: 6.0 V – 28 V (10.0 V – 28 V for installations in a UL-certified environment) ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 3.5 A
CURRENT CONSUMPTION	Max. 300 mA @ 6.0 V
TEMPERATURE RANGE	Operating: -20 °C up to +60 °C (-4 °F up to +140 °F) Storage: -20 °C up to +70 °C (-4 °F up to +158 °F)
RELATIVE HUMIDITY	Mounted front: IP65 protected housing Transport/Storage: 5% to 95% non-condensing
READ / WRITE DISTANCE	LF and HF: up to 80 mm / 3.15 inch, depending on environment and transponder BLE: up to several meters/feet
WEIGHT	Reader, potted, with connectors and mounting plate: approx. 87.50 g / 3.09 oz
SABOTAGE DETECTION	Tamper switch
WIRE CONNECTORS	X1, 4-pin: RS-485 and power supply X2: 6-pin: Wiegand X1, X2: Plug-in connection terminal blocks, screw fastening of wires for wires 0.2 to 1.0 mm ² (for installation in a UL-certified environment, the minimum permissible wire size to be used shall not be less than 26 AWG (0.13 mm ²)) X3: 4-pin USB connector: 1.25 mm pitch, for maintenance and configuration purposes only
SIGNALING	2 LED areas: upper left RGB, upper right white; LEDs dimmable LED brightness controllable via proximity and ambient light sensors
KEYPAD	Reader optionally available with backlit keypad with touch function (0 to 9, * and #), programmable function key White LEDs, individually dimmable, LED brightness controllable via proximity and ambient light sensors
PERIPHERAL INTERFACES	RS-485, output 5V Wiegand (D0/D1) with up to three additional input lines (IN1, IN2, IN3)
PROTOCOLS	OSDP v2.2
TRANSMISSION SPEED	HF Air: up to 848 kbit/s, BLE Air: up to 100 kbit/s, Host RS-485: up to 38,400 baud
CERTIFICATION NAME	Secustos MU20 LEGIC
CERTIFICATIONS	Non-exhaustive list ¹⁾ : CE/RED, FCC, IC, UL listed ²⁾ , TAA compliant, REACH and RoHS-III compliant

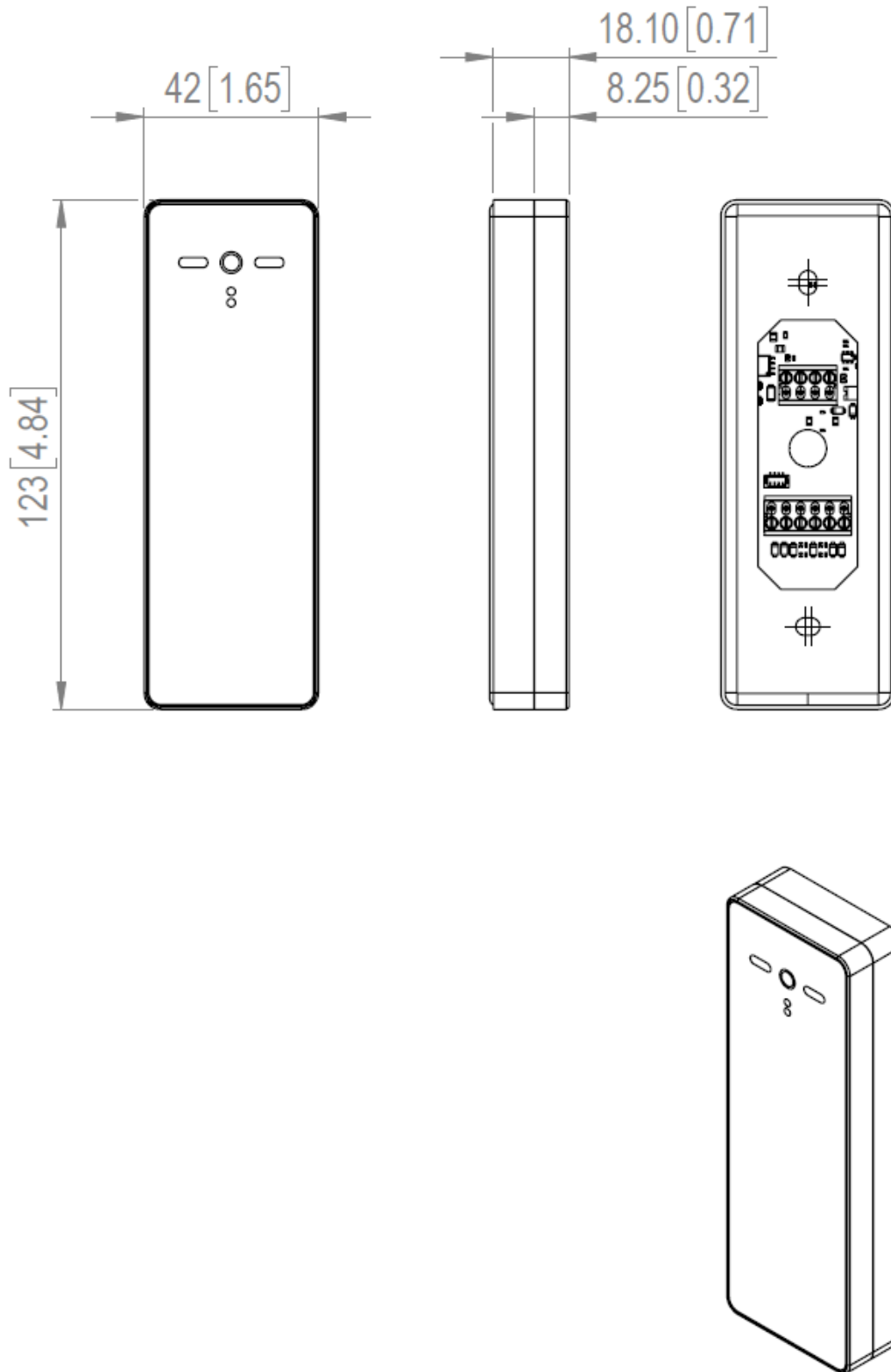
¹⁾The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product. ²⁾Pending

ORDER CODES	Reader models with keypad
	T4SW-DL10NDSW7-OSEU: Reader with silver frame/white glass front
	T4SW-DL10NDGY7-OSEU: Reader with gray frame/gray glass front
	Reader models without keypad
	T4SW-DL00NDSW7-OSEU: Reader with silver frame/white glass front
	T4SW-DL00NDGY7-OSEU: Reader with gray frame/gray glass front

ACCESSORIES

MOUNTING FRAME	T4SA-LWF1SL: mounting frame, silver
	T4SA-LWF1GY: mounting frame, gray
USB CABLES	CAB-J4FSBAMSB150: maintenance and configuration cable
SECO APP	Seco App, available in Google Play for Android NFC devices

TECHNICAL DRAWINGS



All measures in mm [inch]

CONNECTOR ASSIGNMENT



Power supply

V+	Input voltage 6 – 28 V ¹⁾
V-	Ground

Data transfer¹⁾

A+	RS-485, cable length: max. 1000 m
B-	RS-485, cable length: max. 1000 m
D0	Wiegand D0, cable length: max 200 m
D1	Wiegand D1, cable length: max 200 m
IN1	Digital input 1, cable length: max 200 m
IN2	Digital input 2, cable length: max 200 m
IN3	Digital input 3, cable length: max 200 m
INS	Digital input S (for external Sabotage switch), optional if sabotage button is not available on the reader, cable length: max 200 m

Cable routing requirements: twisted pair cabling (D0/GND, D1/GND). Refer to the Secustos manual for detailed information about cabling and dimensions.

Maintenance / Configuration

USB	4-pin USB connector, 1.25 mm pitch (for maintenance and configuration purposes only)
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Typical installation cables are JY(ST)Y 4x2x0.6 or JY(ST)Y 4x2x0.8.

¹⁾ Installation in a UL-certified environment: Please observe the input voltage of 10 – 28 V and the max. cable length of 30 m. In addition, the minimum permissible wire size to be used shall not be less than 23 AWG (0.28 mm²).

Alternatively, any other appropriate cables that meet the prerequisites of RS-485 installations and wirings can be used.

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